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From: Kiefer, Robyn V NWK
Sent: Mon 6/2/2014 9:35:28 PM

Subject: Fw: [EXTERNAL] a video re Th-230 in NYC -- and yet another West Lake clean-up plea.

Fyi.

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From: Kay Drey [mailto:tritium3@sbcglobal.net]

Sent: Monday, June 02, 2014 12:08 PM Pacific Standard Time

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Subject: [EXTERNAL] a video re Th-230 in NYC -- and yet another West Lake clean-up plea.

This email is just one more of countless St. Louis citizen and local-government efforts --- stretching back almost forty years --- to urge the federal government to excavate and export the United States' nuclear weapons radioactive wastes away from West Lake Landfill in St. Louis's Missouri River floodplain.

Away from <u>water</u>, away from <u>people</u>, and now we have to add: and away from today's and future fires.

Also: away from both <u>RADIOLOGICAL AREA ONE and from the bigger, hotter AREA</u> TWO.

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Robert Alvarez, a senior scholar at the Institute for Policy Studies, is a world-renowned expert on radioactive waste. When he spoke in North St. Louis County in November 2013, he said he believes that **West Lake Landfill** may have more **thorium-230** than anywhere else in the U.S., and perhaps in the world.

I believe that the following facts about **thorium-230** are of particular interest and concern:

- (1) It has a half-life of 75,400 years. [Brookhaven Natl. Lab.: <u>Nuclear Wallet Cards</u>. 2011] You have to multiply a radioactive isotope's half-life by at least <u>ten</u> to figure out how long it will continue releasing radioactive particles & rays.
- (2) Thorium-230 and some of its "daughter products" release **alpha** radiation. The Nuclear Regulatory Commission ranks the "quality factor" [that is: *hazard*] of alpha particles as being 20 times greater than beta particles or gamma rays. [*Code of Federal Regulations*. Title 10, Chap. 1, Sec. 20.1004.]

A recent 14-minute video, produced by *The New Yorker* magazine, describes how some people in New York City are <u>also</u> now having to learn about thorium-230. *The video link is below.*

Sincerely, Kay Drey. 515 West Point Ave. University City, MO. 63130. 314-725-7676

p.s. Some St. Louis residents and federal, state, and local government officials have been worrying about the West Lake



Landfill since 1976 when the <u>St. Louis Post-Dispatch</u> first learned and reported that long-lived, highly radioactive materials had been illegally dumped at West Lake, *in the Missouri River floodplain*.

Only eight river-miles downstream from West Lake lie the intakes for the North **COUNTY** Water Treatment Plant that serves Florissant and other mostly North County communities. One of St. Louis **CITY**'s two water treatment plants is located just below the confluence of the Missouri and the Mississippi rivers. That plant's intakes are totally within the Missouri River's flow streams. Therefore, this major City plant <u>also</u> uses Missouri River water.

No filtering technology exists at either of these City or County water plants that can remove West Lake's radioactive isotopes. Thus the West Lake wastes not only impact the air we breathe, but can also impact the water we drink. Quoting an ecological imperative from Hannes Alfven, a 1970 Nobel laureate in physics: "Thou shalt not leave a polluted and poisoned world to future generations."

I am also sending this letter and video link to Governor Nixon, Senators McCaskill and Blunt, and Congress Members Clay and Wagner.

The New Yorker video is entitled "The Most Radioactive Place in New York City."

http://www.newyorker.com/sandbox/projects/radioactive-nyc/